POP-UP PROJECTS FOR SAFE ROUTES TO SCHOOL

Low-Cost, Temporary Interventions to Promote Traffic Calming Around School Campuses, Address Arrival/Dismissal Safety Issues, and Encourage Walking and Biking to School

This guide explores how schools can use "pop-up" demonstration projects to improve safety on and around campus. These temporary activations, often referred to as tactical urbanism, can be used to promote walking and biking to, from, and around campus. You will find examples of local, national, and international projects, tips to support implementation efforts, and links to additional resources.

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GETTING STARTED

What Are Pop-Up Projects for Safe Routes to School?

Pop-up projects are temporary activations, often referred to as tactical urbanism, that can be used to improve a public space through actions that result in reduced speeds, promote awareness of walking and biking, and other safety enhancements.

Pop-up projects can deliver quick, low-cost solutions. Since the process is community-led, these projects effectively broaden public engagement and encourage collaboration between local communities and government. Pop-up projects pilot new concepts that bring awareness to safety and may catalyze investment in permanent solutions.

How Can Safe Routes to School Programs Use Pop-Up Projects?

Safe Routes to School (SRTS) programs can use temporary activations to make it safer, easier, and more fun for students to walk, bike, and roll to school. Pop-up projects provide an opportunity for a school to take ownership of a project, from identifying the problem to implementing a pilot solution.

Implementing pop-up projects on and around school campuses can:

- **Draw attention to safety issues and present an opportunity for group learning.**
- **Quickly and effectively improve safety for students walking and biking to and from school.**
- **Facilitate play and learning.**
- **Build relationships between schools and the community.**
- **Promote active lifestyles that improve community health.**
- **Demonstrate a need for a more permanent solution.**

How to Use This Guide

- **Use this guide to learn about pop-up projects.**
- **Once you have identified a project, follow the implementation tips included in the guide.**

Pop-Up Projects That Improve Safety and Encourage Walking and Biking

The pop-up projects featured in this guide include local, national, and international examples to demonstrate the best example of a project. They are organized by where the intervention will be implemented: on-campus; or near campus (off school property).

Pop-Up Project Costs

Pop-up projects can provide low-cost solutions, but since costs are dependent upon a variety of factors including project location, size, and materials, costs can vary immensely. Not all the examples in this guidebook are low-cost. Each project description includes a cost category (low, medium, or high) based on the estimated cost range presented in the table below. Project descriptions and case studies showcase partnerships and alternative funding sources that may be available to defray project costs.

Low	$500 or less
Medium	$501 - $1,000
High	$1,000 or more

POP-UP PROJECTS ON SCHOOL CAMPUS

These projects can be implemented entirely on school property and focus on promoting active lifestyles, allocating or protecting pedestrian spaces, and integrating adjacent spaces.

WALK, BIKE, AND ROLL ROUTES

A walk, bike, and roll route through campus can be designated using stencils and paint to mark the pavement leading from the public right-of-way to a bike rack or building entrance.

This project is particularly effective when a student may need to cross a busy parking lot or pick-up/drop-off area to access a bike rack or non-motorized vehicle storage area.

Creating a designated route provides a predictable, dedicated space for students and staff biking, walking, or rolling to school and those walking. Using fun stencils and bright colors can make school grounds more attractive and encourage walking, biking, and rolling to school. It also provides a learning opportunity for bike and pedestrian safety.

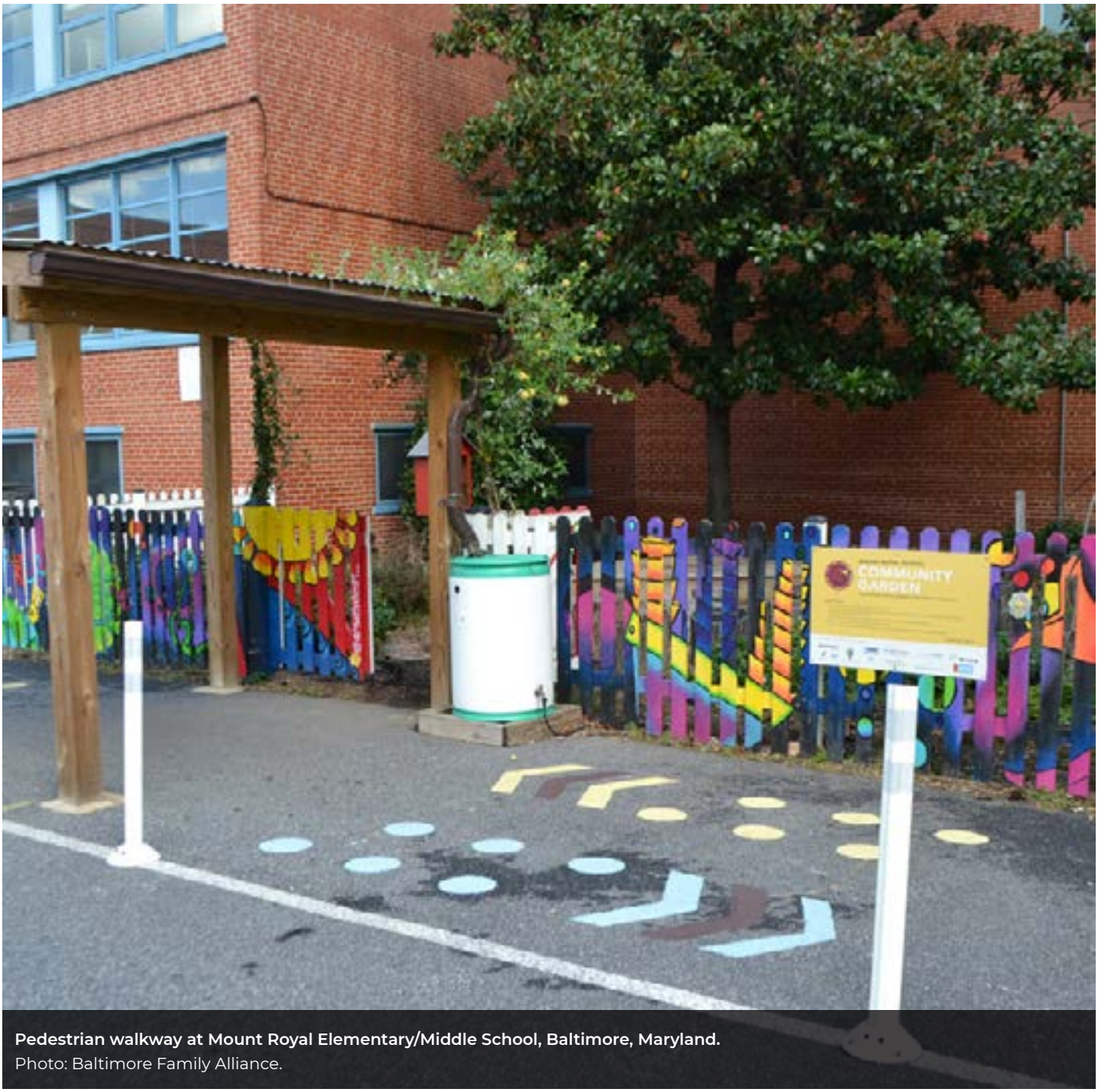
Useful materials/ tools	Paint, chalk, stencils, flex posts (plastic, vertical barriers), traffic cones, and/or other materials. (If you have a walking school bus, the MA SRTS Program can provide you a kit with spray chalk and stencils.)
Site considerations	Identify the preferred route to and from the bike rack or storage area from outside the school campus. This route should be safe, clear of obstacles, and intuitive for students.
Design considerations	Minimize crossing paths with vehicular traffic. Ensure that the design is compliant with standards from the Americans with Disabilities Act (ADA).
Cost estimate	Low

PROJECT EXAMPLE

Pedestrian Walkway, Mount Royal Elementary/ Middle School, Baltimore, Maryland.

A parking lot at Mount Royal School was being used for competing activities: 1) a play space; 2) a walkway for students, staff, and community members; and 3) a pick-up and drop-off drive-through.

The Mount Royal Parent Teacher Organization (PTO) collaborated with the school district's facilities department, city council representatives, school administration, and the Maryland Institute College of Art's (MICA) social design students to create a solution to protect the play space and pedestrians. Using flex posts and paint, the team reclaimed a portion of the lot to create a safe pedestrian walkway. Additionally, an area near the school's front entrance was converted from street parking to a designated "kiss and ride" (drop-off) lane to limit vehicles accessing the lot.



Pedestrian walkway at Mount Royal Elementary/Middle School, Baltimore, Maryland.
Photo: Baltimore Family Alliance.

RECLAIMED SETBACKS

The term "setback" refers to the distance a building must be from the front, side, and rear property lines according to building and zoning codes. This space, between the public right-of-way and a building, is often underutilized and can look unattractive. An underutilized setback also separates the school from the neighborhood and surrounding community.

Reclaimed setbacks intentionally activate the underutilized space between the sidewalk (or public right-of-way) and the school or school building. Developing this area activates the space, making walking and biking more inviting. It also provides visual interest, enhances the area's vibrancy, encourages social interaction, and builds community.

Useful materials/ tools	Planters, tables, chairs/benches, chalk, paint, and/or other materials.
Site considerations	Any area identified as underutilized should undergo an analysis to confirm that using the area will not restrict access and is safe for temporary reprogramming.
Design considerations	Ensure that the design is ADA compliant. Partner with a local non-profit for design assistance, implementation, programming, and maintenance. Organizations such as your local bike-ped group, United Way, or Rotary Club may be willing to help. Consider reaching out to a non-profit aligned with the proposed programming.
Cost estimate	Medium to High

PROJECT EXAMPLE

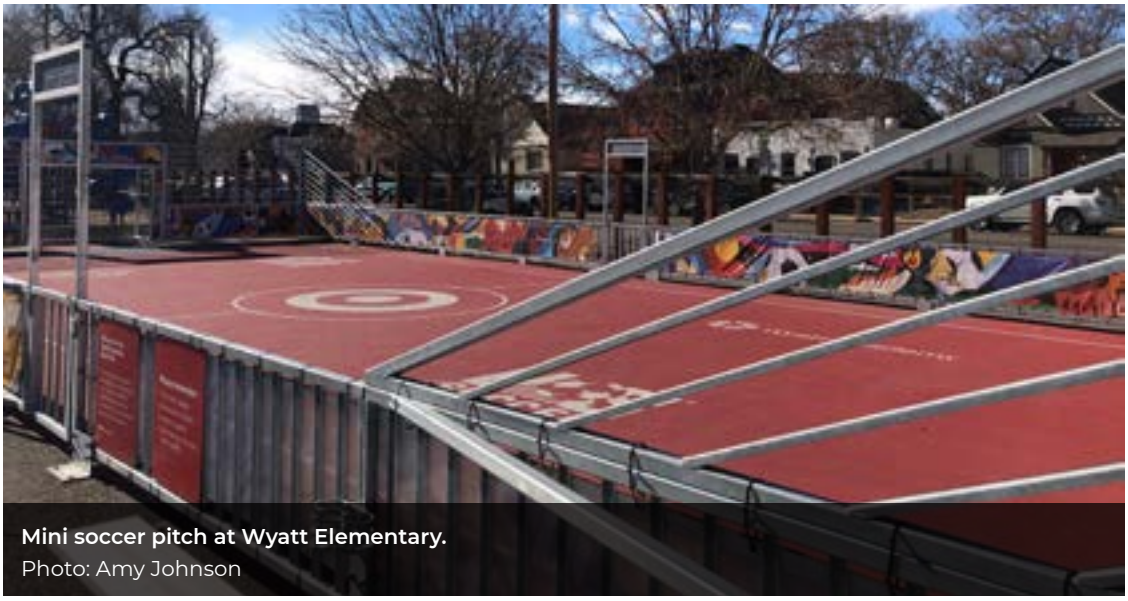
Morey Middle School Community Garden, Denver, Colorado.

The Morey Middle School garden is one of several school-based community gardens operated by Denver Urban Gardens (a non-profit organization) to provide a bridge between the school and the surrounding community. Students benefit from hands-on lessons in biology and ecology, horticulture, wellness and nutrition, recycling, and composting, and community members can access the space to grow food.

Community garden at Morey Middle School.
Photo: Denver Urban Gardens

Mini soccer pitch at Wyatt Elementary, Denver, Colorado.

A mini soccer pitch fills the space between the sidewalk and school building at an elementary school. The pitch was provided through a partnership with Target and the U.S. Soccer Foundation for safe and accessible places for families to play.



Mini soccer pitch at Wyatt Elementary.
Photo: Amy Johnson

ENHANCED BIKE PARKING

Well-maintained and attractive bike parking facilities demonstrate a school's support for bicycling. There are several quick and low-cost solutions to improve bicycle parking facilities on school campuses. Moving the location of a bike rack is one simple solution. A bike rack is often hidden from view, located far from entryways, or installed on grass or dirt. School facilities departments and/or volunteers can move the bike racks to improve visibility, parking conditions, and utilization. Consider covering an existing bike rack to protect it from inclement weather.

Allowing students to paint and/or decorate the bike rack or shelter can rejuvenate an unattractive, underutilized bike rack and create a sense of ownership.

A school that does not have adequate bike parking should work with a local bike shop or bike group to get guidance on the best type of racks, quantity, and placement. Partnering with your local municipality may qualify your school to purchase discounted bike racks through MAPC's collective purchasing agreement.

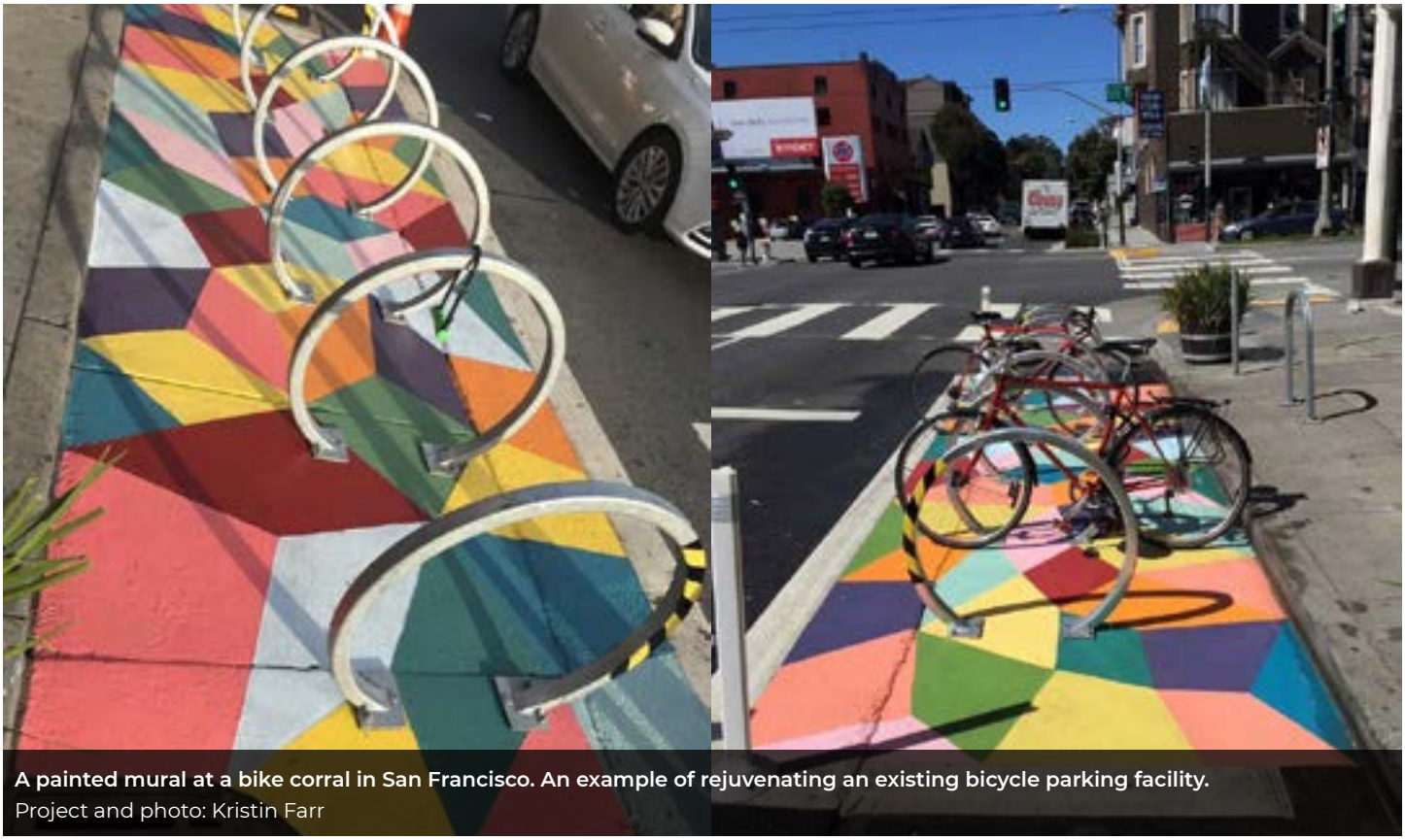
Useful materials/tools	Depending on the improvement, this can include paint, lumber, non-corrosive fasteners, galvanized steel posts, metal roof, and paint.
Site considerations	Racks or other storage areas should be located near entrances in highly visible areas. Ensure appropriate space between racks and other objects such as fencing, bushes, and buildings. Locate bicycle parking facilities on paved surfaces.
Design considerations	Portland Public Schools' Bike Shelter Development Guide provides information on how to build bike shelters on school sites. It is specifically designed for parent volunteer groups, school staff, and students interested in building bike shelters on school campuses. When moving or adding a bike rack, work with a local bike shop or group to get guidance on the best placement, quantity, and type of rack.
Cost estimate	Low to High (depends on improvement)

PROJECT EXAMPLE

Roosevelt Middle School, Upgraded Bicycle Parking, Eugene, Oregon.

While Roosevelt Middle School's existing bike racks met student demand, the bike racks and the location were sub-par. Local advocates connected the school with the University of Oregon architecture department's Design Bridge program. The Design Bridge students conducted planning charettes and created several possible bicycle parking designs. The final solution replaced the existing wheel bender/toaster-style racks with staple racks, half of which were covered. Staple racks resemble an inverted U and offer two points of contact to securely lock the bike frame. Wheel bender racks are more prone to theft because only the front wheel is locked to the rack. Since the upgrade, bicycling to campus has doubled, increasing from 7 to 15 percent of all trips.

Upgraded covered bicycle parking at Roosevelt Middle School in Eugene, Oregon.
Photo: Eugene Springfield Safe Routes to School



A painted mural at a bike corral in San Francisco. An example of rejuvenating an existing bicycle parking facility.
Project and photo: Kristin Farr

POP-UP PROJECTS NEAR SCHOOL CAMPUS

These projects are intended to be implemented outside of school property and focus on slowing traffic, allocating or protecting pedestrian space, promoting active lifestyles, and integrating adjacent spaces.

CURB EXTENSIONS

Intersections are typically designed to move vehicular traffic as efficiently as possible, with pedestrians' needs coming second. Implementing curb extensions, sometimes called bump-outs (or bulb-outs), narrow the road width, reducing vehicle speeds and crossing distances for pedestrians, creating a safer and more comfortable crossing. Bump-outs can be delineated by using paint on the roadway surface to extend the curb. Curb extensions generally require some form of physical boundary between the painted area and the road. This physical boundary can take many forms, from using planters and traffic cones to plastic or concrete barriers. Incorporating eye-catching designs and bright colors make the crosswalks more visible.

Useful materials/ tools	Traffic cones, paint, chalk, planters, flex posts (plastic, vertical barriers), and other materials. (If you have a walking school bus, the MA SRTS Program can provide you a kit with spray chalk and stencils.)
Site considerations	Curb extensions are generally only recommended where designed street speeds are below 30 miles per hour.
Design considerations	Refer to the National Association of City Transportation Officials' (NACTO) Urban Street Design Guide for detailed information about design considerations. Any curb extension design must adhere to municipal regulations. Ensure that the design is ADA compliant. Any traffic control devices such as cones or barriers will need to be compliant with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD).
Cost estimate	Medium to High

PROJECT EXAMPLE

Barclay STEM Crosswalks, Barclay Elementary/ Middle School, Baltimore, Maryland.

School groups, neighborhood groups, and the Baltimore Department of Transportation worked with Graham Projects on a community-based design to address the problem of vehicles speeding through the intersection adjacent to Barclay Elementary/Middle School.

ADA compliant curb bump-outs were created with pavement line striping and flex posts at all four corners of the intersection. Local volunteers installed the design, which incorporates symbols and colors inspired by drawings created by students during a schoolwide workshop. This project improved safety by narrowing traffic lanes to force motorists to slow down, lessening the crossing distance, and enhancing the visibility of people (or individuals) waiting to cross the street, including students, older adults, bicyclists, and people using strollers and mobility devices and aids.

Curb extensions adjacent to Barclay Elementary/Middle School, Baltimore, Maryland.
Photo and project: Graham Coreil-Allen

SHARED STREETS

Shared streets or sidewalk extensions reallocate space for pedestrians by either increasing the width available or dedicating/formalizing a pedestrian zone. Alternatively, this strategy could be used to reallocate space to bicyclists by piloting bike lanes.

Useful materials/ tools	Traffic cones, flex posts, plastic or concrete barriers, paint, and other materials.
Site considerations	Shared streets should be implemented along a route that leads to the school that lacks adequate infrastructure and/or roadways with speeding vehicles.
Design considerations	Shared streets generally require a high level of design and coordination with local municipalities. Design considerations include signed speed limits, right-of-way widths, street location, and access requirements. Traffic control devices such as traffic cones or flex posts must be MUTCD compliant.
Cost estimate	Medium

PROJECT EXAMPLE

Bow Street: Shared Street and Curbs Pilot, Somerville, Massachusetts.

The City of Somerville implemented a pilot for shared streets and shared curbs during the summer of 2020. The City used cones to extend the sidewalk out into the street to increase space for walking and biking. The cone extensions also acted as a traffic calming measure. Similar measures could be used around schools to reduce roadway widths and reallocate space to pedestrians and bicyclists.

"The Big Jump", Baltimore, Maryland.

The Big Jump is a temporary shared-use path in Baltimore, Maryland. The community-initiated project provides comfortable connections so that people can safely walk, bike, or roll across I-83 and the Jones Falls Valley.

Father and son bicyclists riding along "The Big Jump". Project by the Baltimore City Department of Transportation with support from a Bikemore and People for Bikes' Big Jump Project. Photo: Brian O'Doherty

"Big Jump Wayfinding" is a component of "The Big Jump" a temporary shared-use path in Baltimore. Photo and project: Graham Coreil-Allen

CREATIVE CROSSWALKS

This strategy converts an existing crosswalk to one with an artful interpretation that increases visibility and driver awareness.

Eye-catching crosswalks can be impactful on multiple fronts; they increase the visibility of people crossing and provide a visual reminder to drivers that pedestrians also use the roadway. This can lead to increased safety for pedestrians accessing school grounds.

When considering a creative crosswalk, be sure to work closely with the municipality and/or local roadway authority. The Federal Highway Administration's (FHWA), Manual for Uniform Traffic Control Devices (MUTCD), is recognized as the national standard for traffic control devices on all roads open to public travel. The MUTCD advises against using "patterns or colors that degrade the contrast of the white transverse pavement markings establishing the crosswalk." Schools or municipalities should maintain the uniformity and recognition of crosswalk markings when designing a creative crosswalk. While the examples shown in this guide may not be consistent with MUTCD standards, there is precedent for creative crosswalks in several municipalities in Massachusetts and throughout the country.

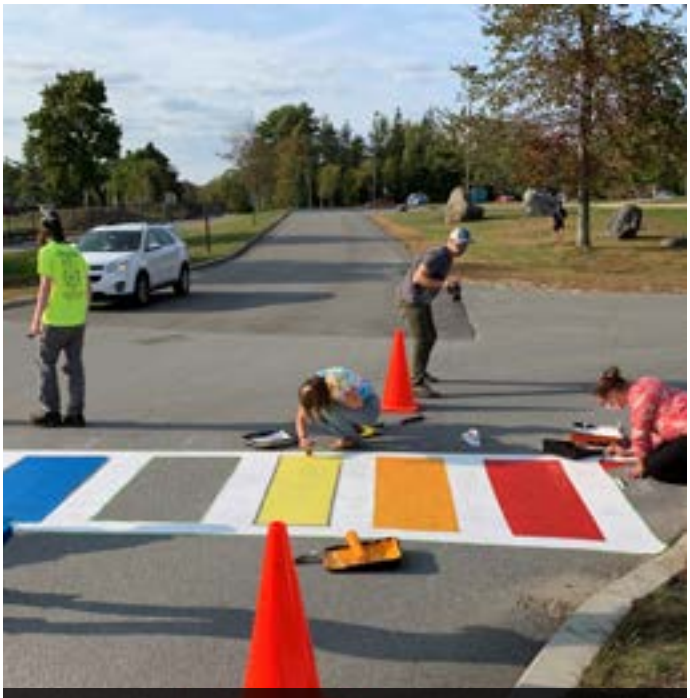
Useful materials/ tools	Paint, tape, chalk, and stencils. (If you have a walking school bus, the MA SRTS Program can provide you a kit with spray chalk and stencils.)
Site considerations	Colorful crosswalks should be implemented where there is high crossing foot traffic approaching the school. Get input from current users before retrofitting an existing crosswalk.
Design considerations	Maintain the uniformity and recognition of crosswalk markings when designing a creative crosswalk. Keep in mind that a creative crosswalk will require special local agency approval and may not be permitted. Refer to the NACTO Urban Street Design Guide for additional information about design considerations for crosswalks and crossings.
Cost estimate	Low to Medium

PROJECT EXAMPLE

3-D Crosswalk at Roberts Elementary School, Medford, MA.

Two elementary school students came up with the idea for a 3-D crosswalk as a low-cost solution to slow traffic outside their school. The innovative design required special approval from the city's mayor and traffic commission and has since been replicated at several other elementary schools in Medford.

3-D crosswalk adjacent to Roberts Elementary in Medford, Massachusetts.
Project and photo: Nate Swain



Ellsworth High School Rainbow Crosswalk.
Project by Ellsworth High School's EHS Gender/Sexuality Diversity Alliance. Photo: Nate Cutting

PROJECT EXAMPLE

Ellsworth High School Rainbow Crosswalk, Ellsworth, Maine.

Students at Ellsworth High School repainted an aged and faded crosswalk on school property with rainbow colors to increase both pedestrian visibility and LGBTQ awareness. The student group spearheading the effort successfully petitioned the school board to approve the design and raised money to fund the project. They received a grant from Healthy Acadia, a community health coalition, to pay for the paint and a downtown revitalization group, Heart of Ellsworth covered other project supplies. Building off the success of the project, the student group painted another rainbow crosswalk at the K-8 school.

INTERSECTION MURALS

Intersection murals communicate to drivers that they are entering a place of neighborhood importance and can cause drivers to slow down, making the intersection safer for bicyclists and pedestrians.

Murals can be a great way to engage both the school and community to create artwork that represents them. Murals can provide a sense of place, encourage drivers to slow down, and bring attention to people walking, rolling, or biking to community destinations. Partner with local arts agencies, arts organizations, and artists to assist with design and implementation.

Consider adding a sign to designate the mural and signal that travelers are entering a place of neighborhood importance.

Useful materials/ tools	Paint, chalk, and stencils. (If you have a walking school bus, the MA SRTS Program can provide you a kit with spray chalk and stencils.)
Site considerations	Use on streets with design speeds below 30 mph.
Design considerations	Will require special permission from and close coordination with the local roadway authority.
Cost estimate	Medium

PROJECT EXAMPLE

Castro Elementary School, Intersection Mural, Denver, Colorado.

The Castro Elementary mural is one of four murals that together create a three-mile greenway to access community destinations in the Westwood neighborhood in Denver, Colorado. The intention of this community-led initiative is to transform the streets into a "place of beauty, strength, and positivity" that will bring attention to people walking and biking in the area. The project was the result of a multi-agency partnership that included: BuCu West (development association), The Trust for Public Land, Denver Department of Transportation and Infrastructure (DOTI), and Denver Community Active Living Coalition (CALC).

Castro Elementary Intersection Mural, Denver, Colorado.
Photos: Kayla Gilbert, Denver Department of Transportation & Infrastructure

WAYFINDING SIGNS AND SIDEWALK MARKINGS

Install temporary signs and/or pavement markings at different locations in the surrounding neighborhood to provide directions to school and indicate the time it takes to walk or bike to campus. The changes help to build community awareness by alerting neighbors and drivers of key school walking or biking routes and to encourage biking, walking, and rolling, and independent mobility.

Stencils and paint can also be used to mark pavement with fun activities such as hopscotch and suggestions to hop or skip. Make DIY wayfinding signs or order custom signs at Walk Your City, a website that allows users to generate custom street signs to improve the walkability of their neighborhood.

Useful materials/ tools	Stencils, paint, signage, and zip ties or other mounting hardware. (If you have a walking school bus, the MA SRTS Program can provide you a kit with spray chalk and stencils.)
Site considerations	This project is most applicable to elementary schools. Identify 3-5 main routes coming from different directions. Consider the conditions of available pedestrian facilities along the route and adjacent roadway traffic volumes and speeds. Provide at least two signs along each route.
Design considerations	Ensure routes are accessible and that the design is ADA compliant. Consult the Active & Safe Routes to School's Wayfinding Signs webpage and School Wayfinding Signage Implementation Guide for additional tips. Signs and any roadway markings may be subject to MUTCD regulations.
Cost estimate	Low to Medium

PROJECT EXAMPLE

Waterloo Region School Signage Pilot, City of Waterloo, Canada.

Through a partnership with the City of Waterloo and the Active and Safe Routes to School (ASRTS) Committee, wayfinding signs and sidewalk markings were installed surrounding eight elementary schools in the City of Waterloo to encourage children to walk or bike to school. Street signs were installed approximately 400 meters (a five-minute walk or a two-minute bike ride) from a participating school. The pilot program also included painted sidewalk games such as hopscotch, paw prints, the alphabet, and number lines in neighborhoods around the schools to make the walk to school more fun. Parents driving their children to school were encouraged to stop near the signs and let them walk the rest of the way.

Wayfinding signage from the Waterloo Region School Signage Pilot. Photo and project: Region of Waterloo Public Health and Emergency Services and City of Waterloo

Wayfinding project in Boston's Mattapan neighborhood to encourage walking and biking to green spaces and public places. Photo: Vivian Ortiz

Pavement marking featuring the alphabet and footprints from the Waterloo Region School Signage Pilot.

Photo and project: Region of Waterloo Public Health and Emergency Services and City of Waterloo.

PARKLETS

On-street parking spaces are temporarily reclaimed and repurposed for alternative uses such as a mini-park with seating, learning exhibit, or play area. This can also be used on campus if there is a parking facility that is underused.

Parklets have many economic, health, and community-building benefits including increased walking and biking, expanded opportunities for social gathering, and enhanced community cohesion through the temporary ownership of a public space.

Useful materials/ tools	Paint, flex posts, planters, or other landscaping elements, signs, street furniture, and other materials.
Site considerations	Parklets work best on roadways with very low vehicle traffic volumes and high foot traffic.
Design considerations	Ensure that the design is ADA compliant. Refer to UCLA's Reclaiming the Right-of-Way: A Toolkit for Creating and Implementing Parklets for design tips. Any traffic control devices used will need to be MUTCD compliant.
Cost estimate	Low to Medium

PROJECT EXAMPLE

Ciencia Pública: Parklet at Buena Vista Horace Mann School, San Francisco, California.

The Ciencia Pública parklet occupies two parking spaces in front of Buena Vista Horace Mann School in San Francisco. The project results from a partnership between the San Francisco Boys & Girls Clubs and a team from the Exploratorium's Studio for Public Spaces. The parklet features a sustainable water use theme, including a desalination pump, a rain gauge, and a low-evaporation plant watering device. Seating and greenery make the parklet a comfortable and attractive neighborhood space, and the parklet has become an active part of the school curriculum. Ciencia Pública was funded by the National Science Foundation to support informal education in science, technology, engineering, and mathematics (STEM) within Latino communities.

Photo: San Francisco Planning/Stella Kim

IMPLEMENTATION TIPS

Follow the tips below to ensure that your project is well-received and can be enjoyed by everyone.

1. Before You Begin

Determine if an intervention is warranted and understand the potential implications of pop-up projects.

- **Collect evidence to support the need for intervention.** Evidence can be collected through a walk audit, parent-guardian travel survey, and/or by gathering personal testimonies from students, school staff, and community members. Research to find out if there are existing plans for the area that document community input or include an engineering study to support a need.
- **Be aware of racial and social disparities.** Pop-up projects use tactical urbanism strategies which are rooted in unsanctioned, grassroots, activist, and do-it-yourself actions. While this connotation has changed over time as implementers have partnered with governing agencies, pop-up projects operate outside of a traditionally formalized planning process and engaging in activities that skirt the law is riskier for some individuals or groups. Given this context, it is important to actively engage all members of the community that may be impacted by the project to gauge their needs and solicit input.

2. Building Your Team

Form a diverse and enthusiastic coalition to successfully shepherd your project from conception to implementation.

- **Recruit team members representing a wide array of organizations.** Consider individuals representing the following groups for inclusion in the project team: municipal planning, transportation or public works department, parents/guardians, school staff, SRTS team, local law enforcement, elected officials, local public health staff, alliance partners, and other community groups. If your project is in the public right-of-way, make sure to include a representative from the city, state, or county transportation department with jurisdiction over the roadway.
- **Identify a champion to lead the effort.** A project champion can be anyone from the project team that has the interest, time, and energy to lead the project.

3. Engaging Your Community

Start in the community to identify needs and determine the best project for working toward a common goal.

- **Engage community partners to understand the issues.** Listen to students, parents, educators, neighborhood groups, and community members to identify and document challenges that demonstrate a need for intervention.
- **Identify potential pop-up projects.** Work together to identify potential solutions that address the need for intervention.

4. Garnering Support

A project is more likely to succeed when the school and community are invested in the project and outcome. Partner with local organizations and get buy-in from stakeholders.

- **Identify funding sources or any available donated resources.** Contact local organizations to ask about in-kind donations such as building materials.
- **Get support for your project.** Work with educators, parents/guardians, and student groups to garner support for the project. Get support and permission from your school and district administration and elected officials.

5. Coordinating With Your Municipality and/or Roadway Authority

Even if your project is entirely on school grounds you may still be required to obtain permits and/or follow municipal, state, or federal guidelines.

Your city's public works or department of transportation can help with the following:

- **Identify any existing restrictions on pop-up projects.** For example, state highways, major collectors, and arterials may not be eligible for pop-up projects. Likewise, projects that obstruct transit access, trash/recycling collection, or public utility access may not be approved.
- **Obtain resources to guide you through the project's application and approval processes.** Some cities have created tactical urbanism guides for schools and community organizations that include eligible project types and convey administrative processes. An example is the City of Boston's Tactical Public Realm program and guides.
- **Identify appropriate design standards.** Most cities have roadway design guidelines and manuals to ensure consistency and safety.
- **Identify applicable federal guidelines.** While design standards and requirements vary from city to city, any traffic control projects will need to adhere to the Manual on Uniform Traffic Control Devices (MUTCD) and most projects will need to comply with the Americans with Disabilities Act (ADA) and Public Right-of Way Accessibility Guidelines (PROWAG).

6. Installing and Maintaining Your Project

Create a plan for project installation, maintenance, and removal before you begin.

- **Create a project installation guide.** This document will identify useful materials and assign roles and responsibilities to volunteers to successfully install the project.
- **Create a plan to maintain and remove the project.** Identify who will be responsible for maintenance and associated costs. Very short-term projects may skip this step. Lastly, create a plan to safely remove the project after the demonstration period ends. You may need to coordinate with the city or your roadway authority for removal of the project especially if this involves temporarily stopping traffic.

The pop-up projects presented in this guidebook are just a small sample of the many low-cost and quick solutions that your school can implement to promote traffic calming around school campuses, address arrival/dismissal safety issues, and encourage walking and biking to school. Your local SRTS team provides professional assistance to partner schools. Reach out to your SRTS coordinator for additional support with your pop-up project.

RESOURCES

The following resources referenced and/or hyperlinked throughout this document provide more examples of tactical urbanism strategies, relevant regulations, and local resources.

Project Ideas

- http://tacticalurbanismguide.com/materials/
- https://thisbigcity.net/tactical-urbanism-in-berlin-sees-parking-spots-turned-into-public-spaces/
- https://www.saferoutespartnership.org/blog/neighbors-south-tucson-transform-their-school-crossing-tactical-urbanism-traffic-circle
- http://tacticalurbanismguide.com/guides/
- https://www.aarp.org/content/dam/aarp/livable-communities/livable-documents/documents-2019/Pop-Up-Tool-Kit-112119-w-spreads.pdf
- https://www.ite.org/pub/?id=e2661246%2D2354%2Dd714%2D51ae%2D29605f57e234
- http://tacticalurbanismguide.com/portfolio/asphalt-art-guide-2/
- http://tacticalurbanismguide.com/guides/the-open-streets-guide/
- http://www.dot.state.mn.us/saferoutes/documents/mndot-demonstration-project-implementation-guide-final.pdf
- https://globaldesigningcities.org/wp-content/uploads/guides/designing-streets-for-kids.pdf
- https://bikeportland.org/wp-content/uploads/2012/05/PPS_Bike_Shelter_Guide_March_2012.pdf

Regulations & Design Guidelines

- https://www.mass.gov/service-details/mutcd-massachusetts-amendments
- https://mutcd.fhwa.dot.gov/
- https://nacto.org/publication/urban-street-design-guide/
- https://www.access-board.gov/files/prowag/PROW-SUP-SNPRM-2013.pdf

Local Resources

- https://www.boston.gov/transportation/tactical-public-realm

MASSACHUSETTS
Safe Routes to School
MASS.GOV/SAFE-ROUTES-TO-SCHOOL

One Federal Street
8th Floor
Boston, MA 02110

mass.gov/safe-routes-to-school

(888) 426-6688

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